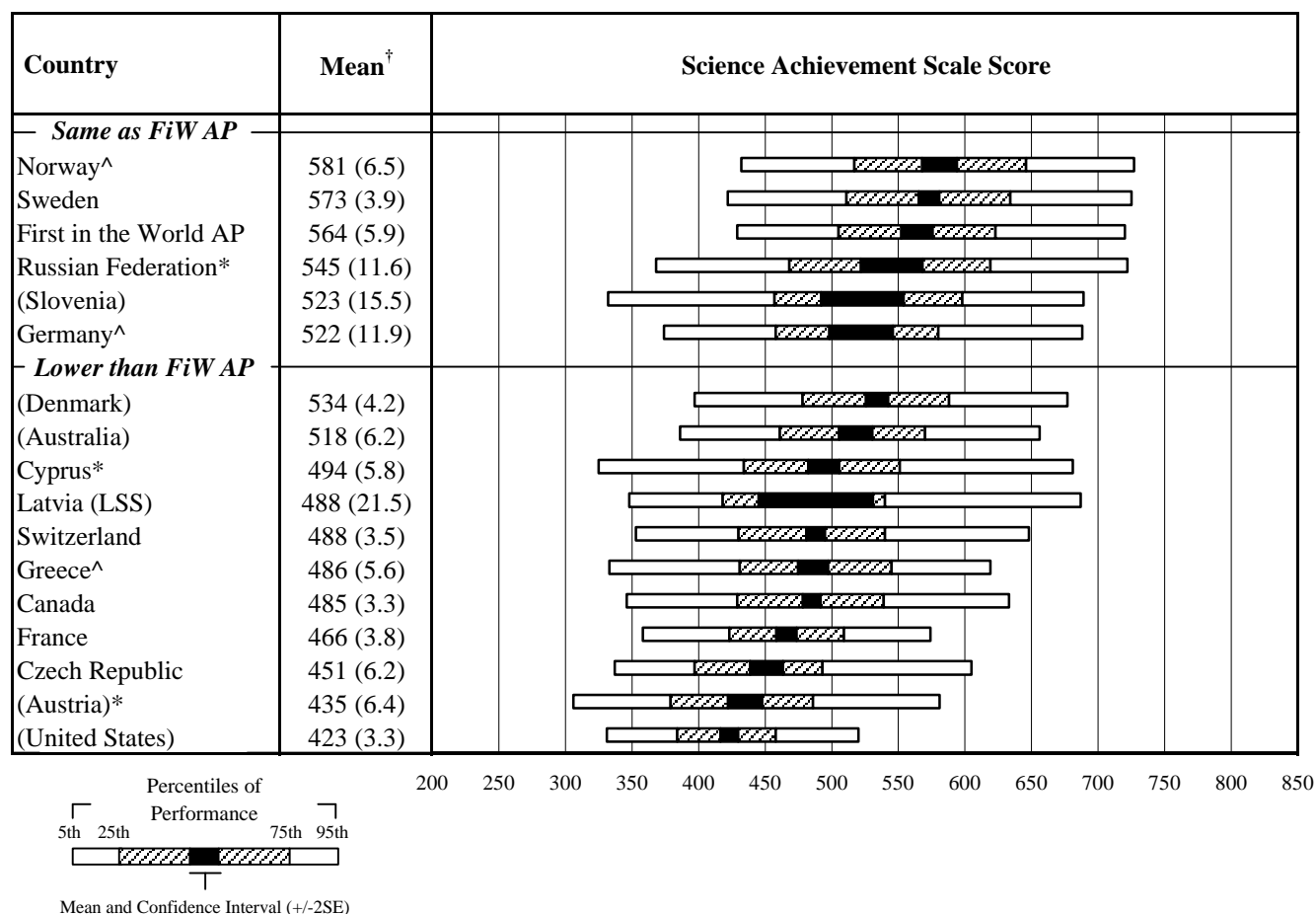


## Exhibit B-12: Distributions of Advanced Science (Physics) Achievement for Twelfth-Grade FiW AP Students<sup>1</sup>



SOURCE: Student Achievement Data, NCREL; tables 8.1, E.5, and E.10 and figure B.6 in Mullis, I.V.S., *et al.* (1998). *Mathematics and Science Achievement in the Final Year of Secondary School: IEA's Third International Mathematics and Science Study*. Chestnut Hill, MA: Center for the Study of Testing, Evaluation, and Educational Policy, Boston College.

<sup>1</sup> Approximately 13 percent of the international school leaving age cohort, 15 percent of the U.S. cohort, and 7 percent of the FiW cohort were covered by the TIMSS sample for this assessment.

\* Nations in which more than 10 percent of the population was excluded from testing. Latvia is designated LSS because only Latvian-speaking schools were tested, which represents less than 65 percent of the population.

<sup>^</sup> Nations in which a participation rate of 75 percent of the schools and students combined was achieved only after replacements for refusals were substituted.

<sup>†</sup> Standard errors appear in parentheses. Because results are rounded to the nearest whole number, some totals may appear inconsistent.

NOTE: Nations not meeting international guidelines are shown in parentheses.